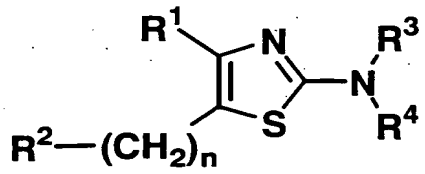
CLAIMS

1. An adenosine A_{2A} receptor antagonist comprising, as the active ingredient, a thiazole derivative represented by a general formula (I):



(I)

{wherein;

n represents an integer of from 0 to 3;

R^1 represents substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

a substituted or unsubstituted alicyclic heterocyclic group, or

a substituted or unsubstituted aromatic heterocyclic group;

R^2 represents a halogen,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

substituted or unsubstituted lower alkynyl,

substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aralkyl,

a substituted or unsubstituted alicyclic heterocyclic group,

a substituted or unsubstituted aromatic heterocyclic group,

substituted or unsubstituted alicyclic heterocyclic-

alkyl,

substituted or unsubstituted aromatic heterocyclic-alkyl,

$-NR^5R^6$ (wherein

R^5 and R^6 may be the same or different, and each represents

a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

substituted or unsubstituted lower alkynyl,

substituted or unsubstituted lower alkanoyl,

substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aralkyl,

a substituted or unsubstituted alicyclic heterocyclic group,

a substituted or unsubstituted aromatic heterocyclic group,

substituted or unsubstituted alicyclic heterocyclic-alkyl, or

substituted or unsubstituted aromatic heterocyclic-alkyl),

$-OR^7$ (wherein

R^7 represents a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkanoyl,

substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aralkyl,

a substituted or unsubstituted alicyclic

heterocyclic group,

a substituted or unsubstituted aromatic heterocyclic group,

substituted or unsubstituted alicyclic heterocyclic-alkyl, or

substituted or unsubstituted aromatic heterocyclic-alkyl), or

$-COR^8$ [wherein

R^8 represents a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

substituted or unsubstituted lower alkynyl,

substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aralkyl,

a substituted or unsubstituted alicyclic heterocyclic group,

a substituted or unsubstituted aromatic heterocyclic group,

substituted or unsubstituted alicyclic heterocyclic-alkyl,

substituted or unsubstituted aromatic heterocyclic-alkyl,

$-NR^9R^{10}$ (wherein

R^9 and R^{10} may be the same or different, and each represent

a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

substituted or unsubstituted lower alkynyl,

substituted or unsubstituted lower alkanoyl,
substituted or unsubstituted lower alkoxy,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic heterocyclic group,
a substituted or unsubstituted aromatic heterocyclic group,
substituted or unsubstituted alicyclic heterocyclic-alkyl, or
substituted or unsubstituted aromatic heterocyclic-alkyl), or

$-OR^{11}$ (wherein

R^{11} represents a hydrogen atom,
substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic heterocyclic group,
a substituted or unsubstituted aromatic heterocyclic group,
substituted or unsubstituted alicyclic heterocyclic-alkyl, or
substituted or unsubstituted aromatic heterocyclic-alkyl)]; and

R^3 and R^4 may be the same or different, and each

represents

a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

substituted or unsubstituted lower alkynyl,

substituted or unsubstituted aralkyl,

substituted or unsubstituted alicyclic heterocyclic-alkyl,

substituted or unsubstituted aromatic heterocyclic-alkyl,

$-COR^{12}$ [wherein

R^{12} represents a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

substituted or unsubstituted lower alkynyl,

substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aralkyl,

a substituted or unsubstituted alicyclic heterocyclic group,

a substituted or unsubstituted aromatic heterocyclic group,

substituted or unsubstituted alicyclic heterocyclic-alkyl,

substituted or unsubstituted aromatic heterocyclic-alkyl,

$-NR^{13}R^{14}$ (wherein

R^{13} and R^{14} may be the same or different, and each represents

a hydrogen atom,

substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted lower alkanoyl,
substituted or unsubstituted lower alkoxy,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic heterocyclic group,
a substituted or unsubstituted aromatic heterocyclic group,
substituted or unsubstituted alicyclic heterocyclic-alkyl, or
substituted or unsubstituted aromatic heterocyclic-alkyl), or

$-OR^{15}$ (wherein

R^{15} represents a hydrogen atom,
substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic heterocyclic group,
a substituted or unsubstituted aromatic heterocyclic group,
substituted or unsubstituted alicyclic heterocyclic-alkyl, or

substituted or unsubstituted aromatic heterocyclic-alkyl)];

provided that,

when R^1 is substituted or unsubstituted phenyl and n is 0, then R^2 is not substituted or unsubstituted 6-oxo-1,6-dihydropyridazin-3-yl},

or a pharmaceutically acceptable salt thereof.

2. The adenosine A_{2A} receptor antagonist according to claim 1, wherein R^1 is substituted or unsubstituted aryl, or a substituted or unsubstituted aromatic heterocyclic group.

3. The adenosine A_{2A} receptor antagonist according to claim 1 or 2, wherein n is 0.

4. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 3, wherein R^2 is substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, substituted or unsubstituted aromatic heterocyclic-alkyl, or $-COR^8$ (wherein R^8 has the same meaning as defined above).

5. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 3, wherein R^2 is substituted or unsubstituted aryl.

6. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 3, wherein R^2 is a substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group.

7. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 3, wherein R^2 is $-COR^8$ (wherein R^8 has the same meaning as defined above).

8. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 4 and 7, wherein R^8 is a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl.

9. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 4 and 7, wherein R^8 is substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group.

10. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 4 and 7, wherein R^8 is

substituted or unsubstituted aryl, a substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group.

11. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10, wherein R^3 is a hydrogen atom.

12. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10, wherein R^3 is lower alkyl or aralkyl.

13. The adenosine A_{2A} receptor antagonist according to claim 11 or 12, wherein R^4 is $-COR^{12}$ (wherein R^{12} has the same meaning as defined above).

14. The adenosine A_{2A} receptor antagonist according to claim 11 or 12, wherein R^4 is $-COR^{12a}$ (wherein R^{12a} is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl).

15. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10, wherein R^3 and R^4 may be the same or different, and each represents $-COR^{12}$ (wherein R^{12}

has the same meaning as defined above).

16. The adenosine A_{2A} receptor antagonist according to claim 1, wherein n is 0; R^1 is a substituted or unsubstituted 5-membered aromatic heterocyclic group containing at least one oxygen atom; and R^2 is $-COR^{8a}$ (wherein R^{8a} represents a substituted or unsubstituted alicyclic heterocyclic group).

17. The adenosine A_{2A} receptor antagonist according to claim 16, wherein R^1 is substituted or unsubstituted furyl.

18. The adenosine A_{2A} receptor antagonist according to claim 16 or 17, wherein R^{8a} is a substituted or unsubstituted alicyclic heterocyclic group containing at least one oxygen atom.

19. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10 and 16 to 18, wherein R^3 is a hydrogen atom; and R^4 is substituted or unsubstituted lower alkyl, substituted or unsubstituted aralkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl.

20. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10 and 16 to 18, wherein R^3 is a hydrogen atom,; and R^4 is lower alkyl, aralkyl, or aromatic heterocyclic-alkyl.

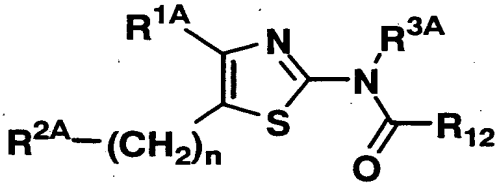
21. The adenosine A_{2A} receptor antagonist according

to any one of claims 1 to 10 and 16 to 18, wherein R^3 and R^4 may be the same or different, and each represents substituted or unsubstituted lower alkyl, substituted or unsubstituted aralkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl.

22. An agent for treating and/or preventing diseases associated with adenosine A_{2A} receptor comprising, as the active ingredient, a thiazole derivative according to any one of claims 1 to 21, or a pharmaceutically acceptable salt thereof.

23. The agent for treating and/or preventing according to claim 22, wherein the disease associated with adenosine A_{2A} receptor is Parkinson's disease.

24. A thiazole derivative represented by a formula (IA):



(IA)

[wherein

R^{1A} represents a substituted or unsubstituted 5-membered aromatic heterocyclic group containing at least one oxygen atom (excluding a group selected from 5-phosphonofuran-2-yl and 5-nitrofuran-2-yl);

R^{12} and n have the same meanings as defined above, respectively;

R^{3A} represents a hydrogen atom;
substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted aralkyl,
substituted or unsubstituted alicyclic heterocyclic-alkyl,
substituted or unsubstituted aromatic heterocyclic-alkyl, or
$-COR^{12A}$ (wherein R^{12A} have the same meaning as that of R^{12}); and
R^{2A} represents substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic heterocyclic group,
a substituted or unsubstituted aromatic heterocyclic group (excluding 2-furyl),
substituted or unsubstituted alicyclic heterocyclic-alkyl,
substituted or unsubstituted aromatic heterocyclic-alkyl,
$-NR^5R^6$ (wherein R^5 and R^6 have the same meanings as defined above, respectively),
$-OR^7$ (wherein R^7 has the same meaning as defined above), or
$-COR^8$ (wherein R^8 has the same meaning as defined

above)],

or a pharmaceutically acceptable salt thereof.

25. The thiazole derivative according to claim 24, wherein R^{1A} is substituted or unsubstituted furyl, or a pharmaceutically acceptable salt thereof.

26. The thiazole derivative according to claim 24 or 25, wherein n is 0, or a pharmaceutically acceptable salt thereof.

27. The thiazole derivative according to any one of claims 24 to 26, wherein R^{2A} is substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, substituted or unsubstituted aromatic heterocyclic-alkyl, or $-COR^8$ (wherein R^8 has the same meaning as defined above), or a pharmaceutically acceptable salt thereof.

28. The thiazole derivative according to any one of claims 24 to 26, wherein R^{2A} is substituted or unsubstituted aryl, or a pharmaceutically acceptable salt thereof.

29. The thiazole derivative according to any one of claims 24 to 26, wherein R^{2A} is a substituted or unsubstituted alicyclic heterocyclic group, or a

substituted or unsubstituted aromatic heterocyclic group, or a pharmaceutically acceptable salt thereof.

30. The thiazole derivative according to any one of claims 24 to 26, wherein R^{2A} is $-COR^8$ (wherein R^8 has the same meaning as defined above), or a pharmaceutically acceptable salt thereof.

31. The thiazole derivative according to claim 30, wherein R^8 is a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl, or a pharmaceutically acceptable salt thereof.

32. The thiazole derivative according to claim 30, wherein R^8 is substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group, or a pharmaceutically acceptable salt thereof.

33. The thiazole derivative according to claim 30, wherein R^8 is substituted or unsubstituted aryl, a

substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group, or a pharmaceutically acceptable salt thereof.

34. The thiazole derivative according to any one of claims 24 to 33, wherein R^{3A} is a hydrogen atom, or a pharmaceutically acceptable salt thereof.

35. The thiazole derivative according to any one of claims 24 to 33, wherein R^{3A} is lower alkyl or aralkyl, or a pharmaceutically acceptable salt thereof.

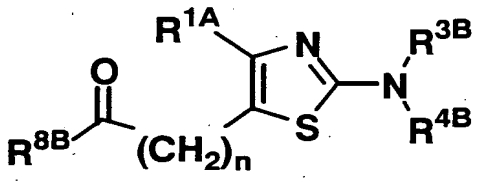
36. The thiazole derivative according to any one of claims 24 to 33, wherein R^{3A} is $-COR^{12A}$ (wherein R^{12A} has the same meaning as defined above), or a pharmaceutically acceptable salt thereof.

37. The thiazole derivative according to claim 36, wherein R^{12A} is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl, or a pharmaceutically acceptable salt thereof.

38. The thiazole derivative according to any one of claims 24 to 37, wherein R^{12} is substituted or

unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl, or a pharmaceutically acceptable salt thereof.

39. A thiazole derivatives represented by a formula (IB):



(IB)

(wherein

n and R^{1A} have the same meanings as defined above, respectively;

R^{3B} represents a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

substituted or unsubstituted lower alkynyl,

substituted or unsubstituted aralkyl,

substituted or unsubstituted alicyclic heterocyclic-alkyl, or

substituted or unsubstituted aromatic heterocyclic-alkyl;

R^{4B} represents substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted aralkyl,
substituted or unsubstituted alicyclic heterocyclic-alkyl, or
substituted or unsubstituted aromatic heterocyclic-alkyl; and

R^{8B} represents a hydrogen atom,
substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic heterocyclic group,
a substituted or unsubstituted aromatic heterocyclic group,
substituted or unsubstituted alicyclic heterocyclic-alkyl, or
substituted or unsubstituted aromatic heterocyclic-alkyl),

or a pharmaceutically acceptable salt thereof.

40. The thiazole derivative according to claim 39, wherein R^{1A} is substituted or unsubstituted furyl, or a pharmaceutically acceptable salt thereof.

41. The thiazole derivative according to claim 39 or 40, wherein n is 0, or a pharmaceutically acceptable

salt thereof.

42. The thiazole derivative according to any one of claims 39 to 41, wherein R^{8B} is a substituted or unsubstituted alicyclic heterocyclic group containing at least one oxygen atom, or a pharmaceutically acceptable salt thereof.

43. The thiazole derivative according to any one of claims 39 to 42, wherein R^{3B} is a hydrogen atom, or a pharmaceutically acceptable salt thereof.

44. The thiazole derivative according to claim 43, wherein R^{4B} is lower alkyl, aralkyl or aromatic heterocyclic-aralkyl, or a pharmaceutically acceptable salt thereof.

45. A pharmaceutical composition comprising, as the active ingredient, a thiazole derivative according to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

46. An adenosine A_{2A} receptor antagonist comprising, as the active ingredient, a thiazole derivative according to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

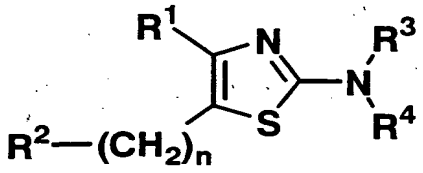
47. An agent for treating and/or preventing diseases associated with adenosine A_{2A} receptor comprising, as the active ingredient, a thiazole derivative according

to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

48. An agent for treating and/or preventing central nervous system diseases comprising, as the active ingredient, a thiazole derivative according to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

49. An agent for treating and/or preventing Parkinson's disease comprising, as the active ingredient, a thiazole derivative according to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

50. A method for treating and/or preventing diseases associated with adenosine A_{2A} receptor, which comprises administering an effective amount of a thiazole derivative represented by a general formula (I):



(I)

(wherein n, R^1, R^2, R^3 and R^4 have the same meanings as defined above, respectively), or a pharmaceutically acceptable salt thereof.